

Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) ~~[[One]]An apparatus, called Personal Mobile Companion (PMC)~~
for ~~use in~~ routing a mobile phone incoming call to a connected land-line house telephone,
~~as shown in Fig. 1, and is connecting to:~~ communications apparatus, the apparatus
comprising:

a headset cable arranged to be interfaced to a headset port of the mobile phone-headphone
output port to receive ringer and voice AC signals from the connected mobile phone as
input;

a RJ11 port arranged to be interfaced with a first cable, the first cable being arranged to
be coupled to the land-line communications apparatus in order to telephone set with
output, from the apparatus, that includes send a DC voltage sufficient needed for
activating the land-line telephone set, AC voltage cycles needed to drive [[the]]a ringer
[[in]]of the land-line telephone set, communications apparatus and to output an AC
voltage for voice conversation;

An approximately 110V AC power plug arranged to be connected to an approximately
110V AC power supply that is arranged to provide sufficient power to operate the
apparatus;

a regular house power outlet to receive power needed for voltage drivers, shown in Fig.
2B, power supply circuit to split house convert an approximately 110V AC power current
to[[into]] an approximately 8V DC and an 11V DC current; power outputs for a
connected land-line telephone and other functional components in the claimed apparatus.

A voltage drivers circuit, the voltage drivers circuit being arranged to split the approximately 11V DC current into an approximately 8V DC current and an approximately 11V DC current; and

A ring tone circuit controller arranged to detect a ringer voltage from the mobile phone to generate an approximately 12V AC current arranged to trigger the ringer of the land-line communications apparatus, the ring tone circuit controller further being arranged to detect the lifting of a handset from a hook of the land-line communications apparatus in order to stop the approximately 12V AC current such that the ringer is silenced.

2. (Currently amended) ~~[[The]]~~An apparatus component called ring tone circuit controller, as part of ~~elements claimed in claim 1 and shown in the block diagram of Fig. 2C,~~ wherein the apparatus is further arranged to interface with the headset port of the which connects to voltage drivers for an 11V DC power supply; to a mobile phone headphone output for [[a]]an approximately 3V AC signal input, and wherein the ring tone circuit controller is arranged to interface with the voltage drivers circuit and further includes; to land line telephone set with a 12V AC ringer cycles when mobile phone receives incoming call and with a 3V AC signal for phone conversation, and is comprised of:

~~[[one]]~~a Ring Tone Generator (RTG) arranged to be interfaced that is connected to ~~[[a]]the headphone outlet port of [[a]]the mobile phone which, upon receiving an incoming call, sends out outputs a the approximately 3V AC signal, the approximately 3V AC signal being arranged to activate the generation of a 6 seconds generate a series of high-low voltage cycles to drive the ringer of a connected land line telephonethe land-~~ line communications apparatus; and

~~[[one]]~~an Impedance Variation Detector (IVD) that is arranged to, upon detecting a line resistance variation caused by lifting or hanging-up the handset from the hook of the land-line communications apparatus~~telephone handset, switch[[s]]the approximately 11V DC power supply to the RTG unit to silence the ringer of the land-line communications apparatus telephone ringer or to get ready prepare for an incoming the~~

approximately 3V AC signal that is arranged to drive the 6-seconds voltage cycles needed to set off land-line telephone-ringer of land-line communications apparatus.

3. (Currently amended) ~~The circuitry design, as part of circuitry elements included in the *IVD* unit claimed~~ An Apparatus as recited in claim 2 further including a circuit design, the circuit design being arranged to include the *IVD* unit, and shown in Fig. 3E, which is used ~~the circuit design being arranged to detect resistance variation caused by lifting or hanging-up the handset of land-line communications apparatus~~ telephone handset in order to control supplying the approximately 11V DC power supply to the *RTG* module through a mechanical relay (18), and is comprised of the circuit design including:

[[one]]a high pass filter circuit that is configured to attenuate substantially low frequency signal in a human voice range, design, consist of the high pass filter including at least one resistor [[45]](45), at least one induction coil [[46]](46), and at least one capacitor [[47]](47), to attenuate any low frequency signal in human voice domain;

two capacitors, 49 and 51, a capacitor arrangement arranged to remove high frequency background noise;

one pair of diode, 48 and 52, a diode arrangement arranged to regulate a current direction and to compensate for amake parasitic AC voltage into positive; and

[[one]]a differential amplifier [[59]](59) arranged to drive the connected a mechanical rely unit (18).

4. (Currently amended) ~~The circuitry design, as part of circuitry elements included~~ An apparatus as recited in claim 2 and shown in Fig. 3D, which is used to connect further including a clock generator (19) and a circuit design, the circuit design being arranged to provide the approximately 11V DC power supply to [[a]]the clock generator upon detecting [[a]]the approximately 3V AC voice signal input from the mobile phone, and it includes: the circuit design including:

~~[[one]]a ring tone trigger circuitry design, as shown in Fig. 3G, that is made of a pair of connecting device (10) including an emitter diode (71) and a receiver diodes (73) arranged to detect the 3V AC signal input from mobile phone[[,]];~~

~~a transistor arranged to eliminate compensate for a low frequency analog signal (72); [[,]]~~

~~a diode (74) arranged to regulate a current direction[[,]];~~

~~a high frequency filtering capacitor[[,]] (75);~~

~~a pair of voltage stabilizing zener diodes, and a MOSFET transistor to turn on the connection for 11V DC power supply, through a mechanical relay, to a clock generator;~~

~~one normally ON a mechanical relay (18) that has a default ON state, the mechanical relay being arranged is placed between [[one]]the IVD and [[one]]the RTG units, as shown in Fig. 3E and stated in Claim 2, and is made of the mechanical relay including an [[one]]inductor (60a) and approximately three terminals (60b, 60c, and 60d) [[to]]that are arranged to switch off the 11V DC power supply after-when the IVD [[unit]]detects [[the]]-connected phone a line resistance variation of the land-line communication apparatus[[,]]; and~~

~~a voltage stabilizing zener diode arrangement and a MOSFET transistor (78) arranged to turn on a connection for the 11V DC power supply through the mechanical reply (18) to the clock generator (19).~~

- ~~5. (Currently amended) A method of using the claimed apparatus, as stated in claim 1, to connect an analog signal output from mobile phone unit and convert it into an analog input needed for land line telephone set to carry out phone conversation through the following sequences: for utilizing an apparatus for routing a mobile phone incoming call to a connected land-line communications apparatus, the method comprising;~~

- a) ~~the first, connect~~ connecting the claimed apparatus to a earplug-outlet headset port of a mobile phone for signal inputsuch that the headset port of the mobile phone provides an input AC signal to the apparatus;
- b) ~~the second, connect~~ connecting the claimed apparatus to [[a]]an RJ11 port of the land-line telephone set communications apparatus to enable the apparatus to send-out output a DC power-needed-voltage that is arranged to activate the land-line-telephone-set communications apparatus;
- c) ~~the third, detect an~~ detecting the input AC signal from the headset port of a mobile phone, earplug to activate **RTG** circuitry designed, as stated in claim 4, in order wherein the input AC signal is arranged to generate-activate a ring tone generator of the apparatus in order to generate a series of 6 seconds-high-low voltage cycles arranged to drive a ringer of the land-line-telephone-ringer communications apparatus;
- d) ~~the fourth, detect~~ detecting a first resistance variation, in-connected-line-after-the first resistance variation being caused by alternating a configuration of a handset of the land-line handset is picked up using the **IVD** circuitry design, as stated in claim 3, communications apparatus to a first configuration, wherein the resistance variation is arranged to be detected by an impedance variation detector and is arranged to-switch remove power-supply to **RTG** module from ring tone generator in order to stop a-ring series of high-low voltage cycles-to-the land-line telephone;
- e) ~~the fifth, the claimed apparatus, as stated in claim 1, now provides~~ providing a path for an approximately 3V AC voice-signal current between the mobile phone and the land-line-telephone communications apparatus to-carry-out enable voice communication;
- f) altering the configuration of the land-line communications apparatus to a second configuration;

g) ~~the sixth, detecting the resistance variation in connected line after alternating the configuration of the handset of the land-line telephone handset is hang-up~~ communications apparatus to the second configuration using the impedance variance detector to provide power to the ring tone generator to enable a series of , at end of ~~phone conversation, using the *IVD* circuitry design, as stated in claim 3, to switch power supply to *RTG* module to be ready for generating a high-low ringer ring voltage cycles to~~ on the land-line telephone communications apparatus; and the seventh, the apparatus is in ~~ready mode;~~

h) ~~awaiting for an input the AC input signal from the headset port of the mobile phone earplug, to such that steps c) – g) are repeated. repeat the sequences from the third to the sixth.~~

6. (Currently amended) A method as recited of using the claimed apparatus, following the first, the second, the fifth, the sixth, and the seventh steps stated in claim 5 wherein each of steps a), b), e), f), g), and h) is associated with , to serve as an analog signal path for a ~~phone conversation and occurs after initiating a call and having the call on a caller side after the caller initiates number dialing to a receiving party and answered by the receiving party.~~